A Cahners Publication

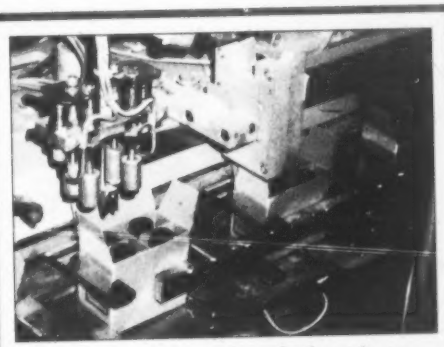
PACKAGING®

FOR BUYERS OF MACHINERY, CONTAINERS, MATERIALS, SUPPLIES, SERVICES/AUGUST 1992

FOCUSING ON COSMETICS

What Do Retailers Want From You?

JIT System Smoothes Flow On Nail Polish Line



Beauty in print-as-needed cartons—
See Line Operations

How Long A Shelf Life Do Food Products Need?

In Marketplace: Buymanship Info On Case-Handling Machinery

PACKAGING

BREAKING NEWS

Accidental poisoning of children remains a big problem

Child-resistant closures have had a positive impact, but accidental poisonings of children continue to be a significant social problem in the United States.

A study reported in the June issue of *Pediatrics*, the journal of the American Academy of Pediatrics, compiled information from nearly 4 million cases of poisoning between 1985 and 1989 involving children younger than six. Of the exposures, says the magazine, 60.5% involved non-pharmaceutical products and 39.4% involved pharmaceuticals.

A total of 111 deaths occurred during that time.

Snacks marketer dares to be dull in introducing new packaging

Marketers at Westbrae Natural Foods, Gardena, Calif., are betting that a new matte-finish multilayer film construction will help attract consumers to their new Lite Puff snack line, which contains 50% less fat than the industry average.

Lite Cheddar Puffs, Lite Ranch Rounds and Lite Pizza Pops are packaged in a construction utilizing Torayfilm matte-finish oriented polypropylene, made by Toray in Japan. The converter is James River.

From the outside in, the film construction consists of six-color, reverse-printed OPP/white polyethylene/metallized OPP/white Surlyn.

"We chose this matte film to introduce our new Lite Puff line, as well as to give a new look to our Original Cheddar Puffs," says Leslie Hyde, Westbrae spokeswoman. "We considered paper but didn't feel it was as durable, and we were looking for extended shelf life as well as impressive appearance."

NFPA endorses rule change allowing irradiation of poultry

The National Food Processors Association says a proposed new rule that would allow the irradiation of poultry would benefit consumers.

The U.S. Dept. of Agriculture's Food Safety and Inspection Service last May proposed amending existing poultry inspection regulations to permit use of irradiation to treat fresh or frozen uncooked poultry and poultry products.

The poultry would be exposed to low doses of gamma-ray radiation in order to control and reduce food-borne pathogens such as salmonella which can be present in raw poultry.

In comments on the proposed rule filed with the FSIS, officials of the NFPA said, "Irradiation has been determined by the FDA to be a safe process for reducing or eliminating microbiological contamination of food products." The NFPA encouraged FSIS to allow the industry to use irradiation as an additional tool to help ensure the safest possible food supply.

Researcher sees demand for film hitting 11 billion pounds by '96

Bill Weizer, an analyst with The Freedonia Group Inc., Cleveland, Ohio, says domestic demand for plastic film will increase 3.4% per year from a depressed 1991 base to 11 billion pounds in 1996.

Among the best opportunities, says Weizer, are LLDPE, HDPE and polypropylene in secondary-packaging and primary food-packaging markets.

Secondary-packaging demand is seen expanding by more than 4% annually to 3.2 billion pounds in 1996, in part as a result of growth in stretch wrap. Demand for film used in food packaging is expected to increase 3.8% per year to 3.1 billion pounds in 1996 as a result of technological improvements in barrier properties and processing techniques.

U.S. PLASTIC FILM DEMAND BY RESIN
(million pounds)

	1980	1991	1996	% Annual Growth 91/96
Plastic Film Demand (total)	5,760	9,320	11,000	3.4
Low density polyethylene	4,025	6,280	7,195	2.8
High density polyethylene	265	940	1,310	6.9
Polypropylene	300	685	900	5.6
Polyester	500	625	713	2.7
Polyvinyl chloride	280	362	420	3.0
Other resins	390	428	462	1.5

Source: The Freedonia Group Inc.

Weizer notes that environmental problems will probably not hamper growth in film use because of the source-reduction capabilities of these materials.

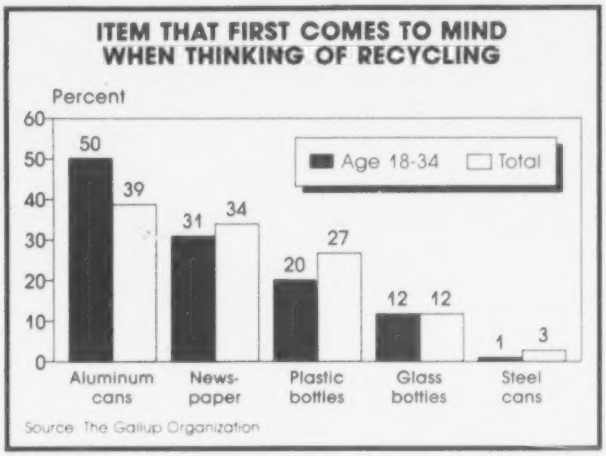
Survey shows Americans are committed to recycling

According to a recent survey of 1,000 Americans by the Gallup Organization, Princeton, N.J., recycling has become a way of life. Fully 97% of the consumers polled said they believed recycling was important in helping to solve the country's solid-waste problem.

When asked what material first came to mind when

PACKAGING's Breaking News is prepared just days prior to publication. Please fax late-breaking news to the attention of Greg Erickson, editor in chief, at (708) 635-6856.

BREAKING NEWS



thinking about recycling, respondents mentioned aluminum, newspaper, plastic bottles, glass bottles and steel cans in that order. The survey was conducted by telephone on behalf of Alcoa.

Seminar on European waste laws set for day before Pack Expo

In Chicago on Nov. 7, the day before the opening of Pack Expo, Pierre J. Louis, general secretary of the World Packaging Organisation and editor of the *European Packaging Newsletter and World Report* will sponsor an afternoon presentation on worldwide environmental initiatives.

Louis says that on Jan. 1, 1993, the birth of a "new Europe" will, with its 400 million customers, look attractive to American industry. "But the environment will be an obstacle," he notes. "There will be stringent rules and legislative barriers, not only for products but also for their packaging." His seminar will offer advice on satisfying often conflicting environmental requirements.

The European Community Directive on Packaging Waste is expected to be adopted by the European Parliament at the end of 1993. Louis will discuss the impact of that on legislation already in force in Germany, France, Denmark, Holland and Italy. Special emphasis will be placed on practical commercial consequences for U.S. exporters.

For further information, contact the *European Packaging Newsletter*, 669 Washington St., Alexandria, VA 22314-4109.

HDPE manufacturing business moves from Hoechst to Fina

Fina Inc. and Hoechst Celanese Corp. have signed a letter of agreement whereby Fina's wholly owned subsidiary Fina Oil and Chemical Co. will acquire Hoechst's HDPE business at Bayport, Texas. The Hoechst facility has an annual capacity of 350 million pounds.

Says Ron W. Haddock, president and CEO of Fina, "HDPE will be a new product for Fina, and it's a natural fit with our business lines in styrene, polystyrene and polypropylene."

PE bakery bag business moves from Mobil to Huntsman

Huntsman Holdings Corp.'s subsidiary Huntsman Design Products Corp. has agreed to purchase the polyethylene bakery-bag manufacturing assets of Mobil Chemcial Co.

Mobil, the third largest supplier of PE bread bags in the U.S., manufactures the bags at a plant in Macedon, N.Y. Huntsman will relocate the operation within a year to a facility near Fairport, N.Y.

Joint venture to produce first plastic soda bottles in Belarus

Pepsi-Cola International and Eastman Chemical Co. have teamed up with two companies in the Republic of Belarus to produce plastic for beverage bottles in the Commonwealth of Independent States.

Valued at an estimated $100 million over five years, the joint venture is the first to pool packaging technology, marketing experience and export capabilities from two U.S. companies with two companies from the C.I.S. The two Belarus companies are leaders in chemicals and synthetic textiles.

The joint venture, called Belpak, will make PET resin at an existing plant in Mogilev. Half the resin will be used to manufacture bottles for Pepsi in the republics of Russia and Belarus; the rest will be sold for hard currency in Europe.

University seeks licensee for time/temperature indicator

Temple University, Philadelphia, is currently seeking a licensee for a its liquid-crystal time/temperature indicator, which is intended for use with packaged foods and pharmaceuticals.

The Temple indicator is sensitive to both the magnitude and duration of excessive temperature exposure.

Two chemicals chosen specifically for each product are contained in a small capsule. When ambient conditions force them to mix, they react in such a way that the temperature variation and its duration can be determined. The indicator is therefore said to be able to track the detailed thermal history of an individual package and provide a signal for rejection by means of a simple color observation.

For more information, contact Rohit Mehta, assistant director, Office of Technology Transfer.

PACKAGING

A CAHNERS PUBLICATION/VOLUME 37 NUMBER 9

Ritz now zips: Reclosable bags, made with recycled materials, are also reusable. Page **13**

FEATURES

What do retailers really want? **24**
Mass-merchandising is taking cosmetics sales away from department stores. Here's how to package products for this growing marketplace.

What price shelf life? **28**
How much shelf life does your product really need? Experts say probably not as much as you think.

JIT printing clips carton costs **34**
Switch to generic cartons smooths production flow and ends outdated materials for Maybelline.

New lipstick line cuts rejects in half **41**
Programmable liquid filler runs dozens of colors while new CIP system slashes downtime 90%.

Cost-justifying palletizing systems **43**
Boost efficiency while reducing costs and worker injuries by matching machines to specific needs.

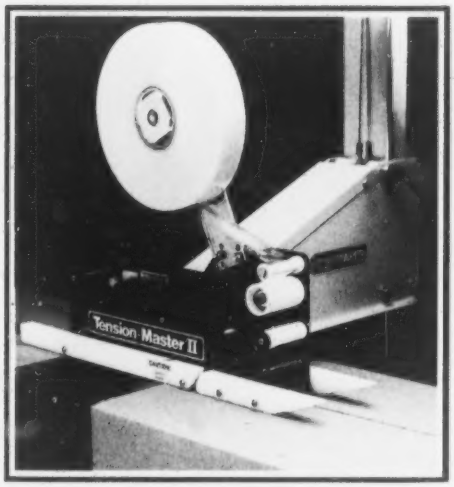
Case sealers provide versatility **47**
Newest systems secure a wide variety of case sizes and types.

Quick Reference Chart **52**
Suppliers of case-sealing equipment.

Handling systems ease work flow **55**
Palletizers, stretch-wrappers and conveyors smooth end-of-line tasks.

Taking it out for a spin **59**
Shopping for a packaging machine? You might be able to try it before you buy it.

Microprocessor-controlled case sealers broaden a machine's capabilities. Page **47**



Cosmetics alert: Retailers want bar codes—and more. Page **24**

DEPARTMENTS

Breaking News: Irradiation rule changes **1**
Editorial: Europeans are not Americans **9**
The Consumer Connection: Consumers say they'll buy recyclables, concentrates **10**
New Packages: Canadian packs show innovation **13**
Environmental News: FDA issues guidelines on recycled-content packages for foods **21**

Packaging Products	**61**	**Classified**	**71**
News Briefs/Calendar	**69**	**Advertisers Index**	**78**
People	**70**	**Reader Service Card**	**49**

NEXT MONTH

Innovative transfer system at Abbott Labs keeps control of packages from start to finish—blisters fly from the filler to the cartoner at 300 a minute.

THE STAFF

JOHN BLATNIK
Publisher

GREG ERICKSON
Editor in Chief

MELISSA LARSON
Senior Editor

MARK SPAULDING
Senior Editor

LISA McTIGUE PIERCE
Associate Editor-Production

AUDREY NAGELBERG
Editorial Assistant

ANTONIOS PRONOITIS
VP/Executive ArtDirector

JUDY WHITT
Director of Art Department

GLEN LUENSMAN
Assoc. Dir., Art Department

QUEENIE BURNS
Senior Art Director

DEENA ZYMM
Associate Art Director

GILBERT MUÑOZ
Director of Graphic Production

RALPH A. BURRIS
Production Supervisor

KATHY KIKKE
Advertising Production Manager

NANCY COOPER
Director of Advertising Contracts

DEBBIE SELIN
Circulation Manager (Denver)

EDITORIAL OFFICES
DES PLAINES, ILL.
60017-5080
Cahners Plaza
1350 E. Touhy Ave.
P.O. Box 5080
708/635-8800

ERNIE KUMMER
Dir. Corp. Reprint Services

LARRY HAYS
Director of Research

MARY O'GRADY
Research Manager

KATE LICHNER
Administrative Services

MARY WILLIAMS
Manager, Marketing Services

CHARLES E. MOODHE
Senior Vice President/
General Manager
Chicago Division

PACKAGING and MARKETING PLUS are registered trademarks of Reed Properties Inc., used under license.

Europeans are not Americans

If you saw Breaking News in PACKAGING last month, you know I went to England in June to cover Pakex. Call me impressionable, but what I experienced has me rethinking the whole global-marketing idea.

Citizens of the U.S. find citizens of the U.K. to be the most approachable of all Europeans, if for no other reason than language. The English do speak English . . . in a manner of speaking. Yet they're not Americans with strange accents. Here's proof:

- English waiters do not appear when your plate is nearly empty to ask if there's anything else they can do for you. Instead, they walk right on by without making eye contact so as to avoid seeming to hurry you.
- English sign painters don't mind using a lot of words if it raises comprehension and sounds polite. For example, a plaque in my hotel bathroom said, "Please be sure that the shower curtain remains inside the bath whilst you are taking a shower."
- The English don't seem to swarm all over their public figures when they show up in public. Perhaps that's why the queen, whom I saw at a polo match, seems to travel without bodyguards. I got so close to the apparently unprotected monarch at one point that . . . well, if I'd wanted to hand her a stick of gum I could have.
- The English eat *clotted cream*.

The point, I guess, is that marketing packaged products globally seems likely to be challenging. People and their lifestyles are different in different parts of the world. That can be a problem.

Answer me this: Would you buy clotted cream just because it came in a nifty package?

I've tasted it. I don't think so.

♦

In May I asked, "When is a package not a package?" and wondered whether all packaged products had to be separable from their packages for use. Last month I got some intriguing answers. Here's another, from Chuck Jolley of Cryovac.

" 'When is a package not a package?' The better question is, 'When does the package become the product?' And if it does, have we lost sight of what packaging is supposed to do?

Would a nice package prompt you to buy clotted cream?

"We think packaging should bring products to market. It should help retain the quality of the product during the distribution process. In a retail context, the package label should help sell the product by promoting its attributes. At the end of a package's life cycle, it should contribute as little as possible to the solid-waste stream.

"Separability, therefore, is a requirement. If [a package] can't be separated from the product, it *is* the product."

Do you buy that? Let me know.

Greg Erickson

EDITOR IN CHIEF

THE CONSUMER CONNECTION

Environmental Concern: Consumers Say They'll Buy Recyclables, Concentrates

Mary O'Grady
Research Manager
Cahners Publishing Co.

The true level of eco-concern by American consumers is, of course, open to debate. But PACKAGING's exclusive Consumer Survey shows significant, continuing willingness on the part of consumers to take action in reducing packaging waste.

Foremost, buying packages that are easy to recycle and then recycling them remains the most popular. About 75% of respondents in the past three surveys say they're willing to do this.

Degradable doubts

Second in preference is buying packages that are degradable. This action was chosen by 65% of consumers this year—down from nearly 72% last year. Perhaps environmental education by packaged-goods makers and the general media have shown consumers that degradability to not the complete answer to packaging's eco-woes.

Buying products in concentrated form is up considerably this year as an action consumers are willing to take—almost 53% compared to 43% in 1991. The sheer proliferation of concentrated household-care products now on the market may account for its growing popularity.

By nearly the same amount—48%—consumers say they would reject products that appear to be overpackaged. About one-third are willing to buy products in large, bulk containers. One-third would buy unpackaged products from bulk bins.

In tracking consumer packaging preferences for eight years, PACKAGING's Consumer Survey has become a highly credible storehouse of vital marketing information. Each month, this column examines a portion of the survey results up close. It's part of our commitment to help you do your job better.

RECYCLING LEADS AS TOP SOLID-WASTE SOLUTION

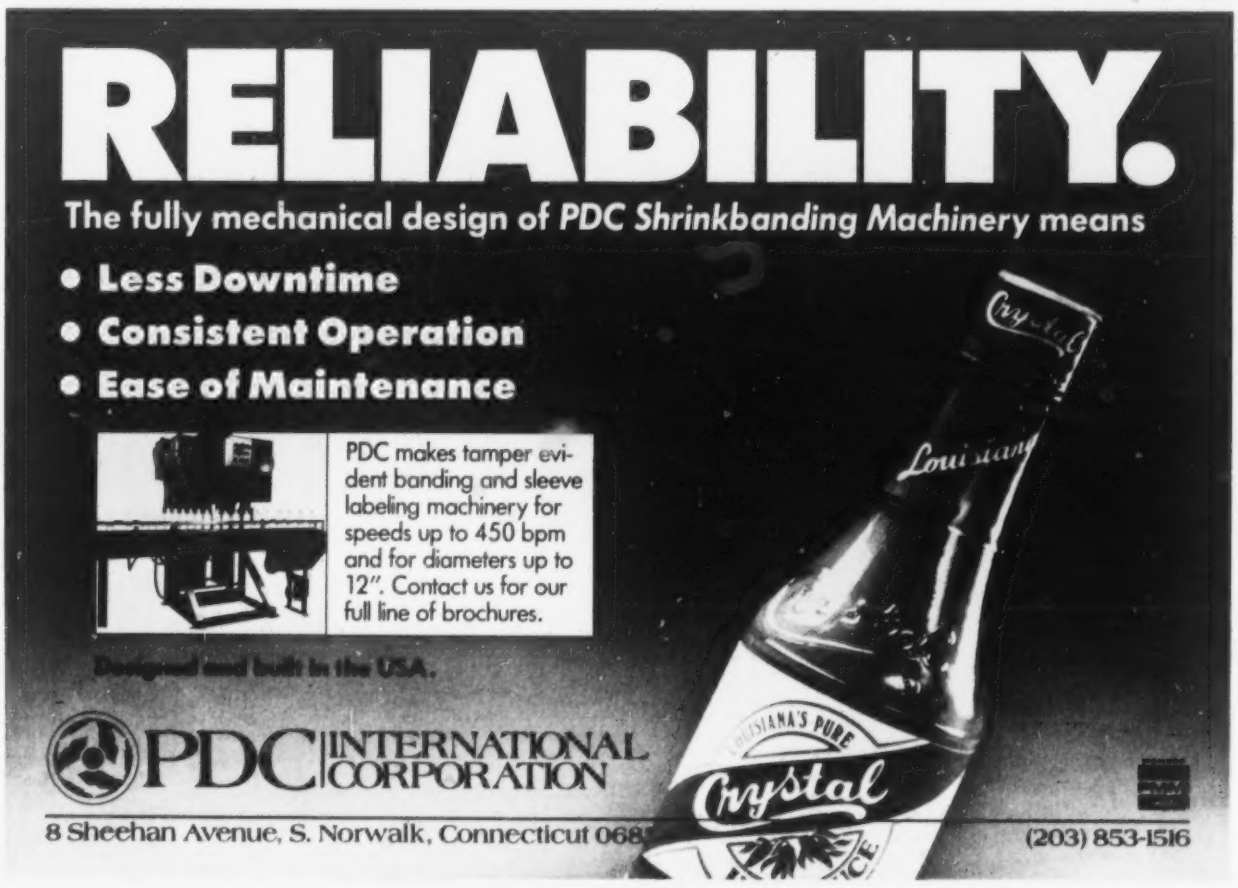
Interest in concentrated products grows significantly for consumers who are willing to take action to help reduce packaging waste.

Question: To help reduce packaging waste, which of the following actions are you willing to take?

Percent of respondents

	1990	1991	1992
Buy packages that are easy to recycle, then recycle them	74.9%	75.5%	74.9%
Buy packages that are degradable	70.9%	71.8%	65.0%
Buy products in concentrated form	--	42.4%	52.7%
Reject products that appear to be overpackaged	38.2%	49.4%	47.7%
Buy products in large, bulk packages	30.4%	40.3%	37.5%
Buy unpackaged products from bulk bins	--	33.0%	31.7%

Source: 1990-1992 PACKAGING Consumer Surveys


RELIABILITY.
The fully mechanical design of PDC Shrinkbanding Machinery means
• Less Downtime
• Consistent Operation
• Ease of Maintenance
PDC makes tamper evident banding and sleeve labeling machinery for speeds up to 450 bpm and for diameters up to 12". Contact us for our full line of brochures.
Designed and built in the USA.
PDC INTERNATIONAL CORPORATION
8 Sheehan Avenue, S. Norwalk, Connecticut 068
(203) 853-1516
LOUISIANA'S PURE
Crystal
ICE

For information circle 10

PART II OF AN EXCLUSIVE SERIES

WHAT DO RETAILERS REALLY WANT?

Mass-merchandising is taking sales away from department stores. Here's how to package cosmetics for this growing marketplace.

Editor's note: Every product manager knows how important packaging is to sales success. But before a product can influence consumers it must interest retailers, and for them packaging is equally important. Part I of this exclusive series, which appeared in February, reported on what retailers want in OTC-pharmaceutical packaging. This month we focus on trends in the cosmetics market and how packagers can respond to the needs of these retailers. In a future issue, we'll publish Part III, a report on what retailers want in packaging for foods.

Mark Spaulding
Senior Editor

As the self-indulgent 1980s rapidly fade into memory and the practical, price-conscious attitudes of the 1990s settle in, value and efficiency are very much on the mind of today's female consumers.

Retailers of both luxuries and necessities have been hit hard by the recession. In response, they have sometimes had to dramatically alter how they sell. And as with many other types of packaged goods, to say that the way cosmetics are sold has changed is clearly an understatement.

The switch is on

Perhaps the biggest change affecting the beauty business is *where* women buy cosmetics and personal-care products. The switch is on to mass-merchandisers—and in a big way.

In 1985, says market researcher Business Trend Analysts, about 18% of all cosmetics products were sold through department stores. That figure will fall to about 11.7% this year. (See chart.)

The drop in market share by department stores has been due almost exclusively to an increase in sales by mass-merchandisers and other outlets such as mail-order companies. Since 1985, retailers such as Wal-Mart, Kmart and others have grabbed an additional 8% of the cosmetics sales pie.

The results of a recent reader survey by *Self* magazine provide some insights into the "whys" of these changes. Almost 25% of respondents said they have switched from department stores to drug/discount stores when buying cosmetics. Mass-merchandise discounters were said to offer lower prices, better value and a wider selection while department stores were cited by nearly 80% as having inflated prices.

For the masses

The dramatic shift toward mass-market cosmetics has meant equally significant changes in packaging. Industry leaders such as Maybelline, Revlon, Cosmair's L'Oreal and Procter & Gamble's Cover Girl brands pay strict attention to the needs and wants of the growing mass-merchandisers. Selling to these retailers requires as much attention to detail as selling to department stores.

"Our stores carry only what we decide to buy," says one health and beauty aids buyer. So how should a product be packaged to best appeal to these "sales gatekeepers"?

A quick perusal of any Wal-Mart, Kmart or PharmMor cosmetics aisle reveals row after row of peggable packaging. Be it foundation, eye shadow, lipstick or blusher, most often it's inside a carded blister pack hanging from a peg. Blisters help stores keep racks well-stocked and with a clean, orderly appearance.

For most cosmetics brands, specific end-aisle or other point-of-purchase displays are inseparable from the product itself. "Displays are an integral technique for selling to mass merchants," says a trade-relations manager for

Mass-market retailers demand bar codes.

a discount drugstore. Because these stores don't usually have staff to offer individual customer attention, flashy or branded displays are indispensable in helping sell product.

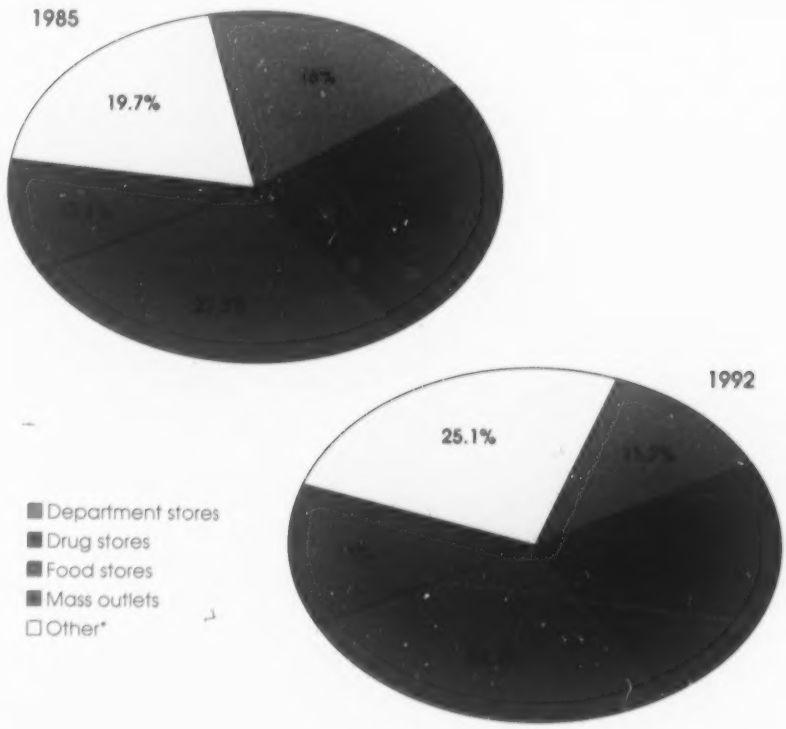
Both packagers and store designers are working on the problem. Since their introduction, Clarion Cosmetics have featured The Clarion Computer—an interactive membrane keyboard and LCD screen which assists women with their color and product choices. On the retailer side, the Walgreen Co. now includes a freestanding cosmetics "fragrance bar" as part of its new store design. Such innovations are another example of how product packaging is growing in importance.

'Stop, thief!'

Shoplifting losses are a major concern in any retail environment. As a rule, tightly sealed clamshell blisters

COSMETICS SALES GROWING FASTEST FOR MASS-MERCHANDISERS

Department-store market share of cosmetic purchases has declined by one third since 1985 while mass-merchandisers and other outlets now account for more than 38% of all cosmetic sales.



Source: Business Trend Analysts *Includes mail order and free-standing outlets

The switch is on to mass-market cosmetics—and in a big way.

make it nearly impossible to steal the product without stealing the package. And stuffing a 3×6-inch carded blister into a purse is more difficult than dropping an unpackaged nail-color bottle into a pocket. But complex packaging also poses a problem for product purchases at home.

One recent development—a zip-open clamshell blister—attempts to solve both these problems. The RF-sealed package for Clarion powdered blushes has a perforated back that easily tears open, boosting consumer convenience. But, tearing open the blister in this way also produces a loud "braaap" sound—a deterent against shoplifting.

Scanning, casing

Packaging details in retailer warehouses and distribution centers are just as important as those in the store. With such huge volumes of merchandise moving through a mass-retailer such as Kmart or Wal-Mart, bar codes on shipping cases and on individual cosmetics shelf packs are essential.

When Maybelline sought to reduce shelf-pack costs by moving carton printing in-house, its customers demanded that UPC codes be maintained. "Retailers open the case, hit the codes with a scan gun and immediately know what they have," says Jason Gaede, a Maybelline engineer.

Shelf packs are small paperboard cartons that hold three, four or six individual packages and are usually labeled as fractions of a dozen—¼ or ½ dozen, for example. Shelf packs supply retailers with just the right amount of a particular item to fill a peg on a display. Because about one-third of retailers receive broken-case lots—or orders of a product broken down into amounts less than a full case—shelf packs also help cut down on in-transit product damage.

Clarion blister pack makes a loud sound when torn open, partly to deter shoplifting.

"Some [cosmetics packagers] ship merchandise directly to the stores," says a Los Angeles-based HBA buyer. "We have three warehouses. This is more cost-effective for us. With smaller packs, there is less handling by the warehouse, less chance of damage."

Warehouse efficiency is a vital concern to mass-merchandisers. Retailers are striving to tighten the loop between vendor orders and delivery. They are adopting the same just-in-time techniques to distribution that product makers now apply to manufacturing. Bar codes help make this possible.

Concern for the environment is being felt throughout retailing. A primary example is Wal-Mart's attempt to stock its shelves with so-called "green products"—a policy begun by the late Sam Walton in 1989.

This concept has been taken to its ultimate by Anita Roddick and her Body Shop chain of cosmetics outlets. Here, all packaging must be lightweight, unbreakable and strong enough to withstand distribution and reuse.

Reduce it, reuse it

The Body Shop can teach a few things to cosmetics makers about source-reduced packaging. In primary packaging, sometimes "the simpler the better" is a rule to design by. Fewer packaging components make the product easier to get at while answering consumer complaints about overpackaged cosmetics. Notably, PACKAGING's exclusive 1992 Consumer Survey found that almost 65% of respondents called cosmetics overpackaged.

For retailers, reusable packaging can extend to corrugated cases as well. Strippable case-sealing tapes allow shipping cartons to stay in circulation longer. These tapes have a reinforced layer that retailers can peel away, leaving the case undamaged. It can then be reused, resealed or more easily recycled because noncellulosic materials have been removed.

By individually analyzing retailer needs and responding accordingly, cosmetics packagers can tailor their "silent salesmen on the shelf" to be a true success—for consumer and retailer alike. ■

PACKAGE AS ARTIFACT: WHEN PRICE IS NO OBJECT

In magazine ads the bottle looks like a piece of ancient pottery washed up by the sea. And that's exactly the effect marketers at Paul Sebastian wanted to achieve for the packaging of designer Alexander Julian's new Womenswear fragrance.

Using a stock clear glass bottle—and a very expensive hand-painting and etching process—they were able to introduce the new fragrance in a bottle that's generating as much interest as the fragrance product itself.

"The uniqueness of the package for this fragrance introduction has meant the difference between success and failure," says Rick Shields, Sebastian's director of purchasing and product development. "We wanted the look and feel of an artifact. Eventually we'll streamline the process somewhat, but hand-painting and etching are the only way to achieve that look right now."

Shields adds that finding two companies who had the expertise to tackle the hand-decorating was a difficult task. "Many companies we approached took one look at the prototype and said, 'No thanks, we'll pass,' " he says.

Heavy-metal-free paints are applied to the clear bottles. Each is then fired, acid-etched, then fired again. Custom caps are matched to the bottle with various iridescent and gold-leaf finishes. A round pressure-sensitive label is blown onto the base of the bottle. No other label is used.

Marketers find that bottles from the same firing differ from each other. They don't mind. "We *want* variation," says Shields.

—*Melissa Larson*

PLEASE RATE THIS ARTICLE

How would you rate this article? To reply, circle the appropriate number on the reader service card:

Outstanding 513
Above Average 514
Average 515
Below Average 516